TM Pesticide effects

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IMMEDIATE RELEASE

DDT Spray Areas Monitoring Reported

Interim results of monitoring to determine the effects of spraying of the Douglas-fir tussock moth were announced today by an environmental monitoring committee that was formed prior to treatment with DDT of nearly 430,000 acres of forest land in Oregon, Washington, and Idaho.

In a study of birds in eastern Oregon, there was no significant difference in survival of nestlings between sprayed and unsprayed areas.

In another study of five groups of sheep grazed on range sprayed with DDT, preliminary data indicate that sheep grazed six weeks or longer on DDT-treated forage will require at least four months on clean feed to insure that DDT levels in the animals drop below the 5 parts per million marketed meat tolerance set by the Environmental Protection Agency.

Those are two of the findings of the monitoring program that involves nearly 200 persons in the three states.

Final monitoring results will not be compiled until about a year from now, according to P.R. (Rod) Canutt, coordinator for the committee and U.S. Forest Service wildlife biologist. Other members of the committee are Warren C. Westgarth of the Oregon Department of Environmental Quality, Donald O. Provost of the Washington Department of Ecology, and W. W. Benson of the Idaho Department of Health and Welfare.

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The success of the monitoring program has been due largely to the cooperation of 26 state and 6 federal agencies, several private research groups, and the Pacific Northwest Regional Commission, Canutt said.

The goals of the committee have been: (1) to insure that DDT was applied safely and restricted to the target area, (2) to measure the accumulation of pesticide residues in the environment and (3) to determine the biological effects (or absence of effects) from the application of DDT.

Application

Four accidental DDT spills occurred during the tussock moth project, but far enough from water to preclude direct contamination. Advanced application and communications equipment coupled with extensive marking of non-spray areas held to a minimum the number of misapplications into buffer zones along streams.

Fish and fresh water mussels were placed in live boxes in several spray area streams and left through the summer. No DDT-related mortality occurred.

As expected, DDT had a severe short-term effect on aquatic and terrestrial insects, Canutt said. The stream buffer strips reduced this effect, as evidenced by the extreme insect mortality in the few cases where stream buffer zones were violated.

A few dead birds were found in spray areas, but it was not possible to determine the cause of death, Canutt said. Field biologists were asked to report bird deaths or any abnormal bird behavior. Reports indicate a possible change in distribution of birds because of spraying, but there were no major losses.

No adverse effects were detected in the large and small mammals studied.

Residue Studies

Samples of air, water, soil sediment in water, aquatic organisms, fish, vegetation, litter, game mammals and birds, small mammals, predatory mammals and birds, song birds, livestock, and human blood were collected before and after spraying. Some 2,600 samples are being analyzed by state laboratories in Idaho, Oregon, and Washington. An additional 700 samples will be collected next spring to complete a one-year cycle of residue movement in the spray area.

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Priority for analytical work has been given to a sheep study where samples are being collected from five groups of sheep grazed on DDT-sprayed range from 1 to 14 weeks. Decline in DDT residues of the groups following their removal to unsprayed range is being closely followed.

Based on data available at this time, it appears that as sheep graze longer on DDT-treated forage they require a longer time period on clean feed to reach the 5 ppm level required for marketed meat. Present data indicate that sheep grazed six weeks or longer on DDT-treated forage will require at least four months on clean feed to drop to 5 ppm.

The USDA Animal and Plant Health Inspection Service and the state departments of agriculture have implemented a special residue monitoring program in the three states to insure no livestock will be marketed until all are below the 5 ppm level. Livestock owners have been requested to hold from slaughter any potentially contaminated animals until March 1, 1975. The monitoring program will continue through the winter to determine the possibility of earlier marketing.

Biological Effects

Studies on the biological effects of DDT on birds of prey, acquatic organisms and certain insect-feeding forest birds are underway. The only project completed at this time is a nestling survival study of 3 species of forest insect-feeding birds. The study, conducted by the Pacific Northwest Forest and Range Experiment Station of the U.S. Forest Service, compared nestling survival of mountain bluebirds, western bluebirds and house wrens to determine if nestling mortality occurred because of lack of available food or from DDT intoxication. Eggs laid, eggs hatched, and nestling survival was compared to control areas through observations on 44 mountain bluebird, 9 western bluebird, and 5 house wren nests. The majority of nests were located in boxes (350 in non-spray and 200 in spray areas) erected to attract the birds. Spray was applied after egg laying and incubation was completed or underway. No significant difference in nestling survival was detected between spray and non-spray areas.

The committee has also identified several current projects as being particularly well suited to study of long range effects of DDT. They have asked EPA Administrator Russell Train for support of his agency in setting up this program.

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